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October 23, 2003

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street SW
Washington, D.C. 20554

Re: CS Docket No. 97-80: Status Report of the Consumer Electronics Association

Dear Ms. Dortch:

The Consumer Electronics Association ("CEA") hereby submits its status report called for in the April 14, 2003 Order and Further Notice of Proposed Rulemaking in the above-referenced proceeding. The first of the status reports to be provided at 90-day intervals was filed jointly by the cable and consumer electronics industries. CEA provides this status report separately because it addresses issues that were not resolved in the Plug and Play agreement – the "downresolution" of HDTV signals on a program-by-program basis, the ability of competitive entrants to compete in the "set-top box" market, and appropriate phase-in practices for new technological requirements.

Implementation of the Unidirectional Agreement

On July 24 we jointly reported, "The unidirectional agreement is an interconnected set of proposed regulations and private business agreements that rely upon each other for their efficacy. Working on the assumption that the proposed regulations will be adopted, the parties have been working through practical issues to implement the unidirectional agreement." These issues pertained largely to the "Joint Test Suite," and more recently to the DFAST License Agreement.

Joint Test Suite

On July 24, we reported: "The parties are finalizing the test suite (which has been much reduced from the OpenCable test suite) under which prototypes of such devices would be tested. CableLabs is working on scheduling to assist the manufacturers in performing the actual certification testing of devices, assuming that the proposed rules are adopted." Between the July joint status report and the joint submission of Uni-Dir-PICS-I01-030903: "Uni-Directional Receiving Device: Conformance Checklist: PICS Proforma" on September 3, 2003, most of the business and technical resources of the CE and cable industries focused on concluding this work. Numerous teleconferences and in-person meetings were dedicated to crystallizing technical disagreements so that the business executives could arrive at compromise solutions for implementation in the Joint Test Suite. That work is now concluded and serves as the basis for the FCC's ruling with respect to first model compliance testing. Engineers from the CE and Cable industries continue to evaluate and document test procedures to execute this testing regime.

DFAST License

At its September 10 meeting the FCC announced its unanimous decision to release regulations based on "Plug & Play" recommendations published in the January 10, 2003 FNPRM, and to issue a (further) FNPRM addressed to particular issues. On October 9, the FCC released its Report & Order, which also encompassed its regulations and the text of the FNPRM. On October 20 CableLabs, on behalf of cable MSOs, published a version of the DFAST License Agreement that would now be available for execution by manufacturers. In response to one item on which the FCC reserved final determination for the subsequent FNPRM – the "downresolution" of HDTV component video outputs – CableLabs made changes to Sections 1.7 and 2.3 of the Compliance Rules, compared to the version that was publicly commented on pursuant to the January 10 FNPRM. In CEA's view, these changes have profound consequences for (1) consumer enjoyment of HDTV, (2) competitive entry into the set-top box market, and (3) future licensing processes as overseen by the FCC.

Before reviewing the significance of these changes, CEA should emphasize that the offering of the DFAST license on October 20 – even with the changes whose consequences we discuss below – is a landmark event and accomplishment for the parties, the Commission, and the Congress. It, combined with the FCC regulations that will take effect later this year, opens a clear path toward the competitive marketing of HDTV receivers that display all digital cable channels through direct connection to a digital cable system.

The changes made by CableLabs will have their impact on (1) consumers who already own most of the HDTV displays sold to date, which must rely on set-top boxes, and (2) potential competitive entrants to the set-top box market.

The issue leading to the change: the "downresolution" of component video outputs. The FCC reserved for further comment, pursuant to its October 20 FNPRM, whether to allow the triggering, for purported copy protection purposes, of the "downresolution" of HDTV signals sent from set-top boxes to existing consumer HDTV receivers. "Downres" involves halving horizontal and vertical resolution – essentially, throwing away three-quarters of the pixels. (It will not imperil the new HDTV receivers, which will not need a set-top and will have "secure" digital inputs.) As published in the January 10 FNPRM the "DFAST" license did not require consumer products to respond to any such "downres" triggers. In the draft of Encoding Rule regulations submitted to the FCC, the cable and CE parties agreed that downresolution should not be allowed for content originating as unencrypted broadcast television, but otherwise could not agree.

Pending a determination via the new FNPRM, the FCC said in the October 9 Report & Order that it would not prohibit downresolution triggers being used for non-broadcast content, but that it would require 30 days' notice prior before any such trigger could be used. Neither the R&O nor the regulations indicated that any supplier of MVPD devices would be required to include a response to any "downres" trigger; nor did they require or suggest any timeframe for doing so. Nor has there been any technical standard, referred to in DFAST, PHILA, or otherwise, for the carriage of any "downres" trigger to a unidirectional cable device.

The change made by CableLabs: no HD component video output unless immediate response to "downresolution" trigger. The DFAST license draft as published by the FCC on January 10, 2003, explicitly permitted, in Section 2.3 of its Compliance Rules ("CR"), Controlled Content to be output through a high definition component video analog output. As offered by the cable industry on October 20, however, this section of DFAST now prohibits any such output unless it applies "downresolution" in response to "Constrained Image Trigger" newly defined in CR 1.7 and a new Appendix A-1.[1] It was also represented to consumer electronics manufacturers that although most currently fielded MSO-provided set-tops could not respond to such triggers, they would, at some time, receive software downloads to require that their own HD component video outputs respond to "downres" triggers.

Impact on consumer enjoyment of HDTV. Most present HDTV consumers – over 6 million of them – own HDTV displays that rely *exclusively* on the "component analog video" input to receive an HDTV program from any other device. If all DBS,[2] MSO-provided, and all competitively provided set-top boxes must respond to all downres triggers, these HDTV pioneers are at risk of, simply, failing to receive HDTV content unless it originated as an over-air TV broadcast. This result was *not* mandated by the FCC, even on an interim basis, because the FCC did *not* require that downresolution triggers be responded to in devices, immediately or otherwise. By failing to provide for any phase-in period, the October 20 DFAST License would have the effect of denying to these early-adopter consumers the chance to procure any set-top products that will afford them the HDTV viewing that their neighbors who buy newer displays will receive for the same subscription fees.

If downresolution is finally ordered by the FCC, a phase-in period would give these consumers the chance to procure products to serve their current sets. Lack of a phase-in period means these consumers cannot do so. If, subsequently, the FCC decides to allow the use of downres triggers, these consumers will be locked into a world in which they lose the HDTV viewing for which they have paid, through no fault of their own. Indeed, these millions of consumers have done exactly what their national government has urged them repeatedly and strongly to do: Buy into the DTV transition promptly in order to speed the return of spectrum and give "free" broadcasting a chance to succeed in the all-digital world now upon us.

Arguably, a sacrifice of early adopter interests might be balanced by a gain in "copy protection" -- if "downres" were, in fact, a copy protection technology. But it is not. It gives no protection against home recording, and it even *facilitates* – by throwing away 3/4 of the bandwidth – the compression of content for transmission over the Internet. The only value of "downres" to content providers is as an attempt to influence the interface designs of *future* display and recording products. Yet its immediate application only punishes those consumers who have *already* bought their display products.

In CEA's view, even if cable MSOs are, unfortunately, committed to "downres," this imposition on HDTV pioneers could have been avoided by allowing, in either the DFAST license or the Commission regulations, a reasonable phase-in period for its use in set-top boxes.

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[1] *See* discussion below re the origin of this definition and Appendix A-1.

[2] MSOs say they need to have a downres capability to match DBS boxes, which can be programmed to downres, though this capability has never been implemented.

It could also have been avoided by anticipating – at least for such a phase-in period – that the Commission, if it did allow downres triggering in the long run, would do so only for early window, interactive content such as Video on Demand and Impulse Pay-Per-View – content that DFAST-licensed products are not configured to receive. But no such phase-in period was provided for by the cable industry.[3]

Impact on competitive entry. Standard industry practice is to allow 18 months for the hardware implementation of newly specified or standardized technologies. While CEA is not privy to its members' particular marketing plans, it is CEA's understanding that for many or most manufacturers, implementation of a response to "downres" triggers will require a change in "silicon," so would appreciably delay the introduction of any product subject to the change. For these manufacturers, the choices are (a) introduction of a competitive set-top[4] product without *any* HD component analog output, or (b) delay in introduction of any such competitive set-top product, possibly for a model year. Course (a) would make the product useless for most of the installed base of HDTV displays, which have *only* component video inputs. Course (b) further pushes back the date for competition in digital cable products – extending an MSO monopoly that is into its sixth decade.

Impact on future licensing process. The sudden inclusion of a draft standard as a mandated requirement and the obligation for immediate compliance are without precedent in all relevant legislative, regulatory, and licensing arenas, even when an important immediate objective has been identified:

Section 1201(k) of the Digital Millennium Copyright Act allows an 18 month period for compliance, even though the "Macrovision" technology referred to was well known in the affected industries.

The provision in the "5C" Adopter Agreement for response to a "downresolution" trigger, on only a secondary basis, was issued only after months of advance notice and consultation with the Adopters *and* the Content Participants, and included an 18-month compliance period. Similar consultation processes and compliance periods are provided for in licensing with respect to the CSS license for DVDs.[5]

The event that triggered this series of reports- the application of the cable industry for relief from its obligation to rely on PODs beginning on January 1, 2005 - was a requirement that thecable industry had been aware of since mid-1998. Nevertheless, when the industry came to the FCC and said it would have trouble *6.5 years after the deadline was set, and 18 months*

[3] The DBS industry is not on record as to a phase-in period.
[4] "Set-top" could include a home theater, DVD, game, PC, or other multi-purpose product. The proliferation of competitive models and products was a key "Plug & Play" goal.
[5] The standardized inclusion in inter-industry protection agreements, to which content owners also are signatories, of a compliance period of no less than 18 months demonstrates that such a compliance period is understood by and acceptable to studios and program producers. If those whose content is to be protected have been willing to accept a minimum 18-month compliance period for all other new technical requirements, then CableLabs would be refusing a compliance period for "downresolution" in the DFAST license for reasons that are unrelated to content protection, and clearly have no relation to theft of service or harm to the network.

before the deadline, it was granted relief. (And the deadline itself was extended for the industry-standard 18 month period.)

In the current instance, once CableLabs and its owners made clear that they would allow component video outputs on DFAST licensed products *only* if they could trigger downresolution, it was the CE companies, albeit reluctantly and after having explored every other alternative that could result in proffer of the DFAST license, who proposed the draft standard means of transmission (now Exhibit A-1 of DFAST) and the new definition of "Constrained Image Trigger," *provided* that a reasonable phase-in period would be allowed for compliance. CEA and CableLabs were engaged in active negotiation concerning a reasonable phase-in time frame when, on October 20, CableLabs publicly tendered DFAST, *with* the agreed A-1 and "Constrained Image" definition, but *without* any phase-in period. This must be a daunting precedent for any manufacturer willing to devise restrictive "tools" jointly with a content distributor.

Status of DFAST. As CableLabs has now terminated any discussion of the DFAST License on an industry-industry basis, CEA has no role to play re DFAST at this time. It is CEA's understanding that this license is now available for signature by any interested party. As CEA said at the outset, this is a landmark occasion, in which the Congress, the Commission, and the parties should take pride. But it comes at an unnecessary high cost to current consumers and to competition.

Negotiation of Bi-directional Agreement

In the July 24 joint status report, the parties noted:

"[T]he unidirectional Agreement provides the foundation for the bi-directional agreement and FCC action on the latter will spur completion of the former." We noted further, "Many aspects of the unidirectional agreement, such as encoding rules, serve as a foundation for the bi-directional negotiations." We summarized progress, up to July 24, and then jointly observed:

> "Both the CE and cable negotiators believe the bi-directional negotiations are moving as rapidly as possible. We expect the pace to pick up considerably when the FCC acts on the proposals submitted with the unidirectional agreement because they form key elements of the framework for the bidirectional agreement."

As we note above, between the July 24 report and September 9, the parties channeled their efforts into perfecting the "Joint Test Suite" and resolving ancillary "unidirectional" issues. Between September 10 and October 9, the DFAST license agreement was not available from CableLabs, pending release of the Report & Order. In the Report & Order and in the comments of Commissioners, the FCC noted the interest and attention of parties in related, complementary, and competitive industries, and the expectation that they would be involved, or at least consulted, on a more comprehensive basis than occurred in "Phase I."

CEA expects that as the Phase II talks resume, the parties will give initial attention to participation and consultation of these interests. CEA believes that as this work proceeds expeditiously, competitive parity should be a vital consideration – not just between MVPD services, but also among the incumbent and potential participants in the market for devices. It was, after all, the infusion of competition into the device market that the Congress had in mind in enacting Section 304 of the 1996 Telecommunications Act, which has been cited by the Commission as the primary basis for its actions in issuing its Plug & Play regulations. And such parity, of course, depends upon the full implementation of the FCC's own rules requiring reliance by all parties—in competitive CE manufacturers' equipment now, and in cable operators' leased or sold STBs and other devices by July 1, 2006--on the exclusive use of the "POD" and elimination of separate rules for incumbents who have a veto over competitive entry.

In summary, CEA applauds the Commission for its issuance of these pro-competitive regulations. CEA believes that obstacles to a fully competitive market that serves all consumers can and should be overcome, and will move forward on that basis.

Respectfully submitted,

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cc: Susan Mort, Esq., Media Bureau